09/801,407

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of claims:

0-57 (Canceled)

58. (Original): A system for the collection and analysis of computer system capacity data in a partition which determines a sizing metric comprising:

a manager in the computer system, said manager operable to issue a command to obtain throughput information of a computer system first partition;

said manager further operable to issue a command to obtain resource utilization information of the computer system first partition;

said manager further operable to calculate a resource control parameter using the information obtained; and

a monitor connected to said manager, said monitor indicating resource allocation responsive to said resource control.

- 59. (New): A system for the collection and analysis of computer system capacity data in a partitioned computer system having a computer system first partition and a computer system second partition, the system comprising:
  - a network;
- a partitioned computer system in communication with the network wherein the partitioned computer system includes instructions to execute a method comprising the steps of:
- a) an analysis application running in a computer system second partition obtaining throughput information of a computer system first partition;
- b) the analysis application obtaining resource utilization information of the computer system first partition;
- c) the analysis application calculating a resource control parameter using the resource utilization information obtained and the throughput information obtained; and
- d) providing the resource control parameter to a user agent, the resource control parameter indicating real time resource performance.
- 60. (New): The system according to claim 59 wherein the resource utilization information comprises CPU utilization.
- 61. (New): The system according to claim 59 comprising the further step of the user agent displaying at a terminal, the resource control parameter wherein the resource control parameter comprises the throughput information as a function of resource utilization.

- 62. (New): The system according to claim 59 comprising the further step of the user agent displaying at a terminal, the resource control parameter comprising inter-interval weighted averages as a function of resource utilization.
- 63. (New): The system according to claim 59 comprising the further step of the user agent displaying at a terminal, the resource control parameter comprising shifted throughput information as a function of resource utilization, wherein the shifted throughput information is derived from the throughput information obtained.
- 64. (New): The system according to claim 59 comprising the further step of the user agent displaying as a graph at a terminal the resource control parameter, the display comprising effective utilization versus resource utilization wherein effective utilization derived in the calculating step comprises change in throughput divided by change in resource utilization.
- 65. (New): The system according to claim 64 comprising the further step of the user agent displaying at a terminal a mark, the mark indicating the utilization at which the effective utilization is half of its maximum.
- 66. (New): The system according to claim 59 comprising the further step of the user agent using the resource control parameter to manage a workload of the first partition.
- 67. (New): The system according to claim 66 wherein the using step is performed by a workload manager.
- (New): The system according to claim 67 wherein the workload manager is in a third partition.

- 69. (New): The system according to claim 59 comprising the further step of providing the throughput information and the resource utilization information for the calculating step by way of a shared portion of memory, the shared portion of memory programmably accessible to both partitions, the shared memory for transferring information between the computer system first partition and the computer system second partition.
- 70. (New): The system according to claim 59 comprising the further step of providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function.
- 71. (New): The system according to claim 66 wherein the workload is managed by modifying resources allocated to the first partition.
- 72. (New): The system according to claim 71 wherein the resources include I/O.
- 73. (New): The system according to claim 71 wherein the resources include memory.
- 74. (New): The system according to claim 71 wherein the resources include processors.
- 75. (New): The system according to claim 66 wherein the workload is managed dynamically.
- 76. (New): The system according to claim 59 wherein the throughput information comprises network packet counts.

- 77. (New): The system according to claim 59 wherein the throughput information comprises an inverse throughput.
- 78. (New): A computer program product for the collection and analysis of computer system capacity data in a partitioned computer system having a computer system first partition and a computer system second partition, the computer program product comprising:
- a storage medium readable by a processing circuit and storing instructions for execution by a processing circuit for performing a method comprising the steps of:
- a) an analysis application running in a computer system second partition obtaining throughput information of a computer system first partition;
- b) the analysis application obtaining resource utilization information of the computer system first partition:
- c) the analysis application calculating a resource control parameter using the resource utilization information obtained and the throughput information obtained; and
- d) providing the resource control parameter to a user agent, the resource control parameter indicating real time resource performance.
- 79. (New): The computer program product according to claim 78 wherein the resource utilization information comprises CPU utilization.
- 80. (New): The computer program product according to claim 78 comprising the further step of the user agent displaying at a terminal, the resource control parameter wherein the resource control parameter comprises the throughput information as a function of resource utilization.

- 81. (New): The computer program product according to claim 78 comprising the further step of the user agent displaying at a terminal, the resource control parameter comprising inter-interval weighted averages as a function of resource utilization.
- 82. (New): The computer program product according to claim 78 comprising the further step of the user agent displaying at a terminal, the resource control parameter comprising shifted throughput information as a function of resource utilization, wherein the shifted throughput information is derived from the throughput information obtained.
- 83. (New): The computer program product according to claim 78 comprising the further step of the user agent displaying as a graph at a terminal the resource control parameter, the display comprising effective utilization versus resource utilization wherein effective utilization derived in the calculating step comprises change in throughput divided by change in resource utilization.
- 84. (New): The computer program product according to claim 83 comprising the further step of the user agent displaying at a terminal a mark, the mark indicating the utilization at which the effective utilization is half of its maximum.
- 85. (New): The computer program product according to claim 78 comprising the further step of the user agent using the resource control parameter to manage a workload of the first partition.
- 86. (New): The computer program product according to claim 85 wherein the using step is performed by a workload manager.

- (New): The computer program product according to claim 85 87. wherein the workload manager is in a third partition.
- 88. (New): The computer program product according to claim 78 comprising the further step of providing the throughput information and the resource utilization information for the calculating step by way of a shared portion of memory, the shared portion of memory programmably accessible to both partitions, the shared memory for transferring information between the computer system first partition and the computer system second partition.
- 89. (New): The computer program product according to claim 78 comprising the further step of providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function.
- 90. (New): The computer program product according to claim 85 wherein the workload is managed by modifying resources allocated to the first partition.
- 91. (New): The computer program product according to claim 90 wherein the resources include I/O.
- 92. (New): The computer program product according to claim 90 wherein the resources include memory.
- 93. (New): The computer program product according to claim 90 wherein the resources include processors.
- 94. (New): The computer program product according to claim 85 wherein the workload is managed dynamically.

- 95. (New): The computer program product according to claim 78 wherein the throughput information comprises network packet counts.
- 96. (New): The computer program product according to claim 78 wherein the throughput information comprises an inverse throughput.
- 97. (New): A computer implemented method for the collection and analysis of computer system capacity data in a partitioned computer system having a computer system first partition and a computer system second partition, the method comprising the steps of:
- a) an analysis application running in a computer system second partition obtaining throughput information of a computer system first partition;
- b) the analysis application obtaining resource utilization information of the computer system first partition;
- c) the analysis application calculating a resource control parameter using the resource utilization information obtained and the throughput information obtained; and
- d) providing the resource control parameter to a user agent, the resource control parameter indicating real time resource performance.
- 98. (New): The method according to claim 97 wherein the resource utilization information comprises CPU utilization.

- 99. (New): The method according to claim 97 comprising the further step of the user agent displaying at a terminal, the resource control parameter wherein the resource control parameter comprises the throughput information as a function of resource utilization.
- 100. (New): The method according to claim 97 comprising the further step of the user agent displaying at a terminal, the resource control parameter comprising inter-interval weighted averages as a function of resource utilization.
- 101. (New): The method according to claim 97 comprising the further step of the user agent displaying at a terminal, the resource control parameter comprising shifted throughput information as a function of resource utilization, wherein the shifted throughput information is derived from the throughput information obtained.
- 102. (New): The method according to claim 97 comprising the further step of the user agent displaying as a graph at a terminal the resource control parameter, the display comprising effective utilization versus resource utilization wherein effective utilization derived in the calculating step comprises change in throughput divided by the change in resource utilization.
- 103. (New): The method according to claim 102 comprising the further step of the user agent displaying at a terminal a mark, the mark indicating the utilization at which the effective utilization is half of its maximum.

- 104. (New): The method according to claim 97 comprising the further step of the user agent using the resource control parameter to manage a workload of the first partition.
- 105. (New): The method according to claim 104 wherein the using step is performed by a workload manager.
- 106. (New): The method according to claim 9 wherein the workload manager is in a third partition.
- 107. (New): The method according to claim 97 comprising the further step of providing the throughput information and the resource utilization information for the calculating step by way of a shared portion of memory, the shared portion of memory programmably accessible to both partitions, the shared memory for transferring information between the computer system first partition and the computer system second partition.
- 108. (New): The method according to claim 98 comprising the further step of providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function.
- 109. (New): The method according to claim 104 wherein the workload is managed by modifying resources allocated to the first partition.
- 110. (New): The method according to claim 109 wherein the resources include I/O.
- 111. (New): The method according to claim 109 wherein the resources include memory.

- 112. (New): A method according to claim 109 wherein the resources include processors.
- 113. (New): A method according to claim 104 wherein the workload is managed dynamically.
- 114. (New): A method according to claim 97 wherein the throughput information comprises network packet counts.
- 115. (New): A method according to claim 97 wherein the throughput information comprises an inverse throughput.